(i) Fill the Flexible Bulk Container to 95% full with a material representative of the product to be shipped.

(ii) Suspend the Flexible Bulk Container by its lifting devices.

(iii) Apply a constant downward force through a specially designed platen. The platen will be a minimum of 60 percent and a maximum of 80 percent of the cross sectional surface area of the Flexible Bulk Container.

(iv) The combination of the mass of the filled Flexible Bulk Container and the force applied through the platen must be a minimum of six times the maximum net mass of the Flexible Bulk Container. The test must be conducted for a period of five minutes.

(v) Other equally effective methods of top lift testing and preparation may be used with approval of the Associate Administrator.

(d) *Criteria for passing the test.* For all Flexible Bulk Containers design types designed to be lifted from the top, there may be no damage to the Flexible Bulk Container or its lifting devices that renders the Flexible Bulk Container unsafe for transport, and no loss of contents.

§ 178.1055 Stacking test.

(a) *General.* The stacking test must be conducted for the qualification of all Flexible Bulk Containers design types.

(b) *Special preparation for the stacking test.* All Flexible Bulk Containers design types must be loaded to their maximum permissible gross mass.

(c) *Test method.* (1) All Flexible Bulk Containers must be placed on their base on level, hard ground and subjected to a uniformly distributed superimposed test load that is four times the design type maximum gross weight for a period of at least twenty-four hours.

(2) For all Flexible Bulk Containers, the load must be applied by one of the following methods:

(i) Four Flexible Bulk Containers of the same type loaded to their maximum permissible gross mass and stacked on the test Flexible Bulk Container;

(ii) The calculated superimposed test load weight loaded on either a flat plate or a reproduction of the base of the Flexible Bulk Container, which is stacked on the test Flexible Bulk Container.

(d) *Criteria for passing the test.* There may be no deterioration that renders the Flexible Bulk Container unsafe for transportation and no loss of contents during the test or after removal of the test load.

§ 178.1060 Topple test.

(a) *General.* The topple test must be conducted for the qualification of all Flexible Bulk Containers design types.

(b) *Special preparation for the topple test.* Flexible Bulk Container design types must be filled to their maximum permissible gross mass, the load being evenly distributed.

(c) *Test method.* Samples of all Flexible Bulk Container design types must be toppled onto any part of its top by lifting the side furthest from the drop edge upon a rigid, non-resilient, smooth, flat and horizontal surface. This test surface must be large enough to be immovable during testing and sufficiently large enough to ensure that the test Flexible Bulk Container falls entirely upon the surface. The test surface must be kept free from local defects capable of influencing the test results.

(d) *Topple height.* (1) For all Flexible Bulk Containers, topple heights are specified as follows: Packing group III: 0.8 m (2.6 feet).

(e) *Criterion for passing the test.* For all Flexible Bulk Container design types there may be no loss of the filling substance. However a slight discharge (e.g., from closures or stitch holes) upon impact is not considered a failure of the Flexible Bulk Container.

§ 178.1065 Righting test.

(a) *General.* The righting test must be conducted for the qualification of all Flexible Bulk Containers design types designed to be lifted from the top or side.

(b) *Special preparation for the righting test.* Flexible Bulk Container design types must be filled to not less than 95% of their capacity and to their maximum permissible gross mass, the load being evenly distributed.

(c) *Test method.* A sample Flexible Bulk Container design type must be tested; the Flexible Bulk Container